

resonant mode is at a frequency that is substantially equal to a harmonic frequency of the main resonant mode.

3/ (Amended) A motor according to claim 1, wherein at least one element having elastic deformation properties is included in at least one of the moving part and the stationary part, said element being separated from the contact face of at least one of said moving part and said stationary part by a shoe-forming portion, and

wherein at least one of the moving part and the stationary part in which the elastic deformation elements are included is dimensioned in such a manner that the frequency of the secondary tangential resonant mode which is the resonant mode in which the shoe-forming portion and the remainder of the part oscillate in phase opposition, is substantially equal to a frequency which is a harmonic frequency of the main tangential resonant mode, in which the shoe-forming portion and the remainder of the part oscillate in phase.